Executive Summary

Congress directed, in the 1994 National Defense Authorization Act (NDAA), that the Counterproliferation Program Review Committee (CPRC) be established to review activities and programs related to countering proliferation within the Office of the Secretary of Defense (OSD), Department of Energy (DOE), U.S. Intelligence, and the Joint Chiefs of Staff (JCS). The high level national commitment to counter proliferation threats is reflected in the CPRC's membership. It is chaired by the Secretary of Defense, and composed of the Secretary of Energy (as Vice Chairman), the Director of Central Intelligence (DCI), and the Chairman of the Joint Chiefs of Staff (CJCS). The CPRC is chartered to make and implement recommendations regarding interdepartmental activities and programs to address shortfalls in existing and programmed capabilities to counter the proliferation of nuclear, biological, and chemical (NBC) weapons of mass destruction (WMD) and their means of delivery. In the 1997 NDAA, Congress broadened the CPRC's responsibilities and specified that the CPRC also review activities and programs of the CPRC-represented organizations related to countering paramilitary and terrorist NBC threats. The findings and recommendations of the CPRC's annual review for 1997 are presented in this its fourth annual report to Congress.

Over the past year, several organizational changes have occurred in the CPRC. In the 1997 NDAA, Congress extended the authority of the CPRC until the year 2000 and designated the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs (ATSD(NCB)) as the Executive Secretary of the CPRC. The Secretary of Defense designated, consistent with the CPRC's charter, the Deputy Secretary of Defense to perform the duties of CPRC Chairman, replacing the Under Secretary of Defense for Acquisition and Technology (USD(A&T)), who had served in that capacity for the past two years. The CPRC also established a Standing Committee to take a more proactive approach to fulfilling its responsibilities under the law. The CPRC Standing Committee meets regularly and is actively working to perform the duties and implement the recommendations of the CPRC. The Standing Committee is composed of the ATSD(NCB) (as Chairman); the Director, Office of Nonproliferation and National Security, DOE (as Vice Chairman); the Special Assistant to the DCI for Nonproliferation; the Deputy Director for Strategy and Policy, Joint Chiefs of Staff (Plans and Policy, J-5); and the Assistant Secretary of Defense for Special Operations/Low-Intensity Conflict (ASD(SO/LIC)).

To guide its program review process, the CPRC established the Areas for Capability Enhancements (ACEs) to characterize those areas where progress is needed to enhance both the warfighting capabilities of the Combatant Commanders, including the Commanders-in-Chief (CINCs), and the overall ability to satisfy the demands of U.S. nonproliferation and counterproliferation policy. The ACEs define those priority areas where additional capabilities are required to meet the challenges posed by the proliferation of NBC weapons and their means of delivery (NBC/M), including paramilitary and terrorist NBC threats. They also serve as a basis to assess progress in meeting the mission needs of the CPRC-represented organizations for countering proliferation. At the direction of the CPRC, the ACEs were reviewed, modified, and reprioritized to ensure that they continue to reflect the integration of the warfighting needs of the CINCs and the overarching national security objectives they support.

The counterproliferation ACEs for 1997 are listed in Table 1. They reflect the newly developed and prioritized CINC counterproliferation required capabilities, results of recent counterproliferation-related studies and analyses conducted in support of the budget development processes of the CPRC-represented organizations, and the growing government-wide concern about the potential for NBC terrorist threats. The ACEs reflect evolving needs and shortfalls that change as threats evolve and become better understood and as research and development (R&D) and acquisition programs mature, enabling new operational capabilities. Updated and current

Table 1: The New Counterproliferation ACEs for 1997

ACE Priorities			
DoD*	**DOE**	**US INTELL**	**Areas for Capability Enhancements (ACEs)**
1	**3**	**1**	Detection, Identification, and Characterization of BW Agents
2	**6**	**3**	Detection, Characterization, and Defeat of NBC/M Facilities with Minimal Collateral Effects
3	**8**	**4**	Detection, Characterization, and Defeat of Underground Facilities with Minimal Collateral Effects
4	**-**	**2**	Theater Ballistic Missile Active Defense**
5	**2**	**5**	Support for Special Operations Forces and Defense Against Paramilitary, Covert Delivery, and Terrorist NBC Threats
6	**4**	**6**	Provide Consequence Management
7	**-**	**7**	Cruise Missile Defense
8	**7**	**8**	Collection, Analysis, and Dissemination of Actionable Intelligence to Counter Proliferation
9	**-**	**13**	Robust Passive Defense to Enable Sustained Operations on the NBC Battlefield
10	**-**	**9**	BW Vaccine RDT&E and Production to Ensure Stockpile Availability
11	**-**	**14**	Target Planning for NBC/M Targets
12	**-**	**11**	Prompt Mobile Target Detection and Defeat
13	**1**	**15**	Detection, Tracking, and Protection of NBC/M and NBC/M-Related Materials and Components
14	**9**	**12**	Support Export Control Activities of the U.S. Government
15	**5**	**10**	Support Inspection and Monitoring Activities of Arms Control Agreements and Regimes

* includes both the OSD and the JCS

** National Missile Defense is associated with this ACE.

ACEs will serve to improve the focus of future programmatic and managerial efforts to counter NBC/M proliferation and NBC terrorist threats. This year, each CPRC-represented organization

individually prioritized the ACEs in accordance with their own departmental mission needs to more accurately reflect each organization's response to countering proliferation.

The CPRC focused its review activities on key R&D and acquisition program accomplishments and milestones to illuminate near-, mid-, and long-term capability improvements. The CPRC has found that a prudent, time-phased response to the challenges posed by NBC/M proliferation and terrorist threats is in place and solidly under way. Although it will take several years to achieve the goals and objectives of the numerous programs responding to the challenges of countering proliferation, the CPRC can report that progress continues to be made in many ACE priority areas. This progress has strengthened U.S. capabilities for countering proliferation and includes the rapid fielding of essential capabilities, focusing interorganizational R&D activities, and improving integration, management, and oversight of programs related to countering proliferation.

Commensurate with the seriousness of the threat, the Department of Defense (which includes OSD, the Joint Staff, Services, and CINCs), DOE, and U.S. Intelligence have each made serious commitments to enhance national capabilities to counter the proliferation of NBC/M and NBC terrorist threats. The combined Department of Defense (DoD) and DOE investment in countering these threats is nearly $5.4 billion for Fiscal Year (FY) 1998 (a 15% increase from FY 1997). DoD's investment in areas strongly related to counterproliferation totals almost $4.9 billion in FY 1998, of which approximately $3.2 billion is for air and missile defense. This investment compares favorably with last year's investment of just under $4.3 billion, reflecting DoD's steady commitment in the face of continuing budget constraints. It must be emphasized that counterproliferation efforts leverage the substantial investments made in maintaining the requisite military forces and defense infrastructure necessary to provide for the basic common defense of the United States. DoD budgets the bulk of its counterproliferation investment in air and missile defense (DoD ACE priorities 4 and 7); detection and characterization of biological warfare (BW) agents (DoD ACE priority 1); maintaining a robust NBC passive defense capability (DoD ACE priority 9); prompt mobile target detection and defeat (DoD ACE priority 12); and supporting inspection, monitoring, and verification activities of arms control agreements (DoD ACE priority 15).

DOE continues to increase its investment in nonproliferation activities with $489.4 million requested for FY 1998, up 19% over last year and up 25% over FY 1996. As part of its core national nonproliferation program, DOE focuses on the tracking and control of nuclear weapons related materials and components (DOE ACE priorities 1 and 9), supporting the inspection and monitoring of arms control agreements (DOE ACE priority 5), and defending against and managing the consequences of covert delivery and terrorist threats (DOE ACE priorities 2 and 4). In addition, at the direction of Congress (based on a CPRC recommendation) and in coordination with DoD and U.S. Intelligence, DOE has begun technology development efforts in detection, identification, and characterization of BW and chemical warfare (CW) agents (DOE ACE priority 3). U.S. Intelligence's investments in programs to counter proliferation are discussed in a separately bound "Intelligence Annex" to this report.

Since the May 1996 CPRC report was submitted, the following key activities have been undertaken and accomplishments achieved by DoD, DOE, and U.S. Intelligence to enhance the interdepartmental response to countering NBC/M proliferation and terrorist threats.

Summary of Key DoD Activities

- ***DoD's Counterproliferation Initiative and the Counterproliferation Council.*** The Counterproliferation Initiative is the DoD-wide effort to meet the military challenges posed by the proliferation of NBC/M. To ensure that DoD's broad counterproliferation policy objectives are met and that the implementation of the Counterproliferation Initiative is integrated and focused, the Secretary of Defense established the Counterproliferation Council in April 1996. The "CP Council" is composed of senior DoD officials and meets on a regular basis, focusing on the potential impact of NBC proliferation on the Department's ability to fight two nearly simultaneous major regional contingencies, as well as on Joint and Service doctrine, training, and exercising for integrated operations in an NBC contaminated environment.

- ***DoD's Counterproliferation Support Program.*** At the heart of DoD's Counterproliferation Initiative is the Counterproliferation Support Program, established in 1994 specifically by the CPRC to address DoD shortfalls in counterproliferation capabilities. This program, managed by ATSD(NCB), uses its budget to leverage DoD R&D and acquisition programs to meet the counterproliferation priorities of the CINCs and accelerate the deployment of enhanced capabilities to the field. Currently, the Counterproliferation Support Program is targeting 8 of the 15 ACEs where leveraged support can be decisive. The Counterproliferation Support Program also conducts technology development activities with the DOE National Laboratories, U.S. Intelligence, and several DoD agencies and organizations.

- ***The Counterproliferation 0400 CONPLAN and the CINCs' Counterproliferation Required Capabilities.*** The CJCS's *Counterproliferation 0400 CONPLAN* (concept plan), which directs CINC planning to implement national level counterproliferation policy in terms of operational objectives and supporting tasks, has been coordinated by the Joint Staff and is being used by each of the CINCs to develop their own area-specific counterproliferation CONPLANs. As part of this process, the CINCs have developed a new prioritized listing of counterproliferation required capabilities necessary to conduct the counterproliferation mission from a military warfighting perspective.

- ***The 1996 Counterproliferation Study.*** This Joint Service, multi-organizational DoD study, performed in support of a Deputy Secretary of Defense-directed review of counterproliferation-related programs, provided senior DoD leadership with estimates of quantitative returns on counterproliferation investments over the FY 1998 - 2003 Future Years Defense Plan (FYDP). The study found that investments in NBC/M passive defense, active defense, and counterforce capabilities have positive and synergistic effects on enhancing the effectiveness of ground combat, air base, and port facility operations in an NBC contaminated environment. Furthermore, it found that adapting NBC passive defense technologies to counterterrorism activities can have a positive impact on reducing casualties and disruptions from terrorist CW/BW threats. As a result of these findings, an increase of $225 million over the FYDP was budgeted to improve BW detection and warning capabilities of U.S. forces, NBC target defeat and counterterrorism capabilities of the U.S. Special Operations Command, and DoD's consequence management capabilities.

- ***Ongoing Advanced Concept Technology Demonstrations (ACTDs).*** To accelerate the fielding of advanced technologies and capabilities to counter NBC/M threats, two ACTDs are currently under way: i) the Counterproliferation ACTD to enhance capabilities for defeating hard and buried NBC/M targets with minimal collateral effects; and ii) the Air Base/Port Bio Detection ACTD to improve capabilities to detect and provide warning of BW attacks at fixed facilities. Field demonstrations of these ACTDs will be completed in FY 1998 and prototype equipment will then be turned over to their CINC sponsors for operational integration and deployment.

- ***Initiation of New Counterproliferation-Related ACTDs.*** To continue the accelerated fielding of enhanced capabilities to counter NBC/M proliferation and NBC terrorist threats, three new counterproliferation-related ACTDs have been initiated: i) the Counterproliferation Counterforce ACTD (a follow-on to the ongoing Counterproliferation ACTD and denoted as the "CP2 ACTD") to provide expanded options for characterizing and defeating hardened and underground NBC/M targets while minimizing collateral effects; ii) the Joint Biological Remote Early Warning System (JBREWS) ACTD to provide enhanced capabilities for early warning of BW attacks; and iii) the Consequence Management "911-BIO" ACTD to improve the interagency emergency response to the consequences of terrorist BW attacks.

- ***The Hard and/or Deeply Buried Target Defeat Capability Program.*** This Joint Service acquisition effort reviewed over 60 concepts submitted by industry and DoD/DOE laboratories (including concepts from 17 foreign countries) to improve capabilities to defeat hard and/or deeply buried targets – a key ACE priority. An integrated product team is now working with the Counterproliferation Support Program to develop plans for participating in the CP2 ACTD.

- ***The Joint Theater Air and Missile Defense Organization (JTAMDO).*** The JTAMDO has been established as the single organization within DoD responsible for coordinating, planning, and providing oversight for Joint integrated theater air and missile defense requirements, operational concept definition, and architecture development. It coordinates theater defense activities with the CINCs, Services, and Defense Agencies.

- ***Reprioritized Funding for U.S. Special Operations Command (USSOCOM).*** Counter-proliferation is a principal mission of USSOCOM. Special Operations Forces (SOF) may be called upon to enforce U.S. counterproliferation policy long before the authorization of direct military action. SOF can carry out measures to interdict sea or land shipments of NBC weapon-related materials, provide deep reconnaissance to locate NBC/M, and conduct precision strikes to capture or neutralize them. In recognition of these capabilities, the Deputy Secretary of Defense directed additional funding to supplement SOF operations and maintenance, procurement, and R&D budgets over the FYDP.

- ***The Force Protection Initiative.*** Several DoD organizations are responding to the call of the Secretary of Defense and the CJCS to review the force protection capabilities of U.S. forces worldwide. Activities under way include fielding near-term improvements in physical security equipment, conducting facility inspections to rectify force protection shortfalls, and developing an R&D plan to address longer term force protection needs.

- ***The Domestic Preparedness Initiative.*** In response to congressional direction, DoD is playing a key role in interagency activities to enhance capabilities to prevent and respond to terrorist incidents involving NBC weapons. DoD is working with the Federal Bureau of Investigation (FBI) and the Federal Emergency Management Agency to make improved technologies and training available to federal, state, and local emergency response authorities. DoD, led by ASD(SO/LIC), is implementing the following activities in response to this initiative: establishing a Chemical Biological Quick Reaction Force (CBQRF) subordinate to the DoD Response Task Force Headquarters; fielding the Marine Corps' Chemical Biological Incident Response Force, an element of the CBQRF; supporting the establishment of Metropolitan Medical Strike Teams; supporting the 911-BIO ACTD and other R&D activities to improve consequence management capabilities; and working closely with state and local authorities to transfer DoD-unique NBC response capabilities and expertise to improve the overall intergovernmental emergency response to NBC incidents.

- ***The Air Force Counterproliferation Integrated Process Team (CIPT).*** The CIPT has been established to plan and coordinate all Air Force counterproliferation activities, including the preparation of an Air Force Counterproliferation Master Plan and the implementation of recommendations derived from the recently completed Air Force study, *The Effects of Chemical and Biological Warfare on Air Base Combat Operations*. This comprehensive study identified the need for improvements in individual and collective protection, training standards and field exercises, automated CW/BW detectors, base-level contamination assessment, and education for senior leadership and new policies and procedures for sustaining operations in CW/BW contaminated environments. It led to the creation of the "Air Force NBC Ability-to-Survive-and-Operate" IPT to oversee passive defense activities in coordination with the CIPT.

- ***The Joint Vaccine Acquisition Program for Biological Defense.*** The need to produce vaccines at a pace rapid enough to match any anticipated battlefield demand is a high CPRC and CINC priority. Significant progress has been made in developing a BW vaccine production program, and a solid acquisition strategy based on comprehensive analyses is in place. A Request for Proposals for a prime systems contractor was released to industry last year, and proposals have been received and are under review. Contract award is expected by the end of FY 1997.

- ***The Chemical Biological Arms Control Technology Program.*** The Defense Special Weapons Agency, through this program, has been established as the DoD lead for developing technologies required for the implementation, verification, monitoring, and inspection activities associated with chemical and biological arms control treaties and agreements, including the Chemical Weapons Convention and the Biological Weapons Convention, while protecting U.S. national security interests.

- ***Responding to Comprehensive Test Ban Treaty (CTBT) Signature.*** With the signing of the CTBT in September 1996, DoD, through its Deputy for Nuclear Treaty Programs, has intensified its efforts to prepare for CTBT implementation by enhancing R&D activities to fulfill the President's CTBT Safeguards program, operationally implementing the International Monitoring System, beginning the transition of the International Data Center to the CTBT Organization, and continuing to provide technical support to the CTBT's Preparatory Commission and the Provisional Technical Secretariat.

- ***Science and Technology Strategic Planning for Counterproliferation.*** The strategic planning process for DoD's science and technology (S&T) program was enhanced again this year with the issuance of DoD's second *Joint Warfighting S&T Plan*. "Countering WMD" and "Chemical/ Biological Warfare Defense" are two of the 10 Joint Warfighting Capability Objectives identified in the plan. The *Joint Warfighting S&T Plan* is incorporated into the Defense Planning Guidance, and its Joint Warfare Capability Objectives receive funding priority in DoD's FYDP.

- ***Key Programmatic Accomplishments.*** Well over 100 DoD programs are strongly supporting national efforts to counter NBC/M proliferation and terrorist threats. Over the past three years, substantial progress has been made in these programs to improve fielded counterproliferation, nonproliferation, and NBC counterterrorism capabilities and to establish the necessary groundwork for continuing advances. A few, selected programmatic accomplishments are summarized in Table 2 below.

Summary of Key DOE Activities

- ***The Chemical and Biological Nonproliferation Program.*** This program has been established in conjunction with DoD and U.S. Intelligence to leverage DOE's extensive expertise in the chemical and biological sciences resident in the National Laboratories. Several R&D projects have been funded based on their ability to expedite the fielding of advanced CW/BW defense capabilities by leveraging and filling gaps in ongoing DoD and U.S. Intelligence programs.

- ***Detecting and Characterizing Worldwide Production of Nuclear Materials and Weapons.*** DOE continued development of complementary remote and on-site tools to detect and characterize foreign nuclear materials production activities. Acquisition of special nuclear materials is the most important step in nuclear weapons proliferation. Therefore, the ability to detect the production of special nuclear materials is a critical proliferation prevention capability, and the ability to detect such production remotely is a powerful deterrent. A highlight during the past year was the demonstration of a ground-based second generation differential absorption lidar system to detect and identify proliferation-related effluents.

- ***Monitoring Worldwide Nuclear Testing.*** DOE has continued to develop ground-based technical methods specifically intended for the CTBT International Monitoring System. Radionuclide monitoring techniques offer an important tool by providing unequivocal proof of a nuclear detonation and critical forensic data to support CTBT verification. DOE has developed

Table 2: DoD's Programmatic Response to the Counterproliferation ACEs

DoD ACE Priority	Selected Accomplishments in DoD Counterproliferation Programs
1. Detection, Identification, and Characterization of BW Agents	• Activated an Army Company equipped with the Biological Integrated Detection System • Interim Biological Agent Detector fielded on selected surface ships deployed to high threat areas • Accelerated development of advanced early warning BW agent detection systems, including the Long Range Biological Standoff Detection and the Joint Biological Point Detection systems • Continuing the Air Base/Port Bio Detection ACTD and initiation of the JBREWS ACTD
2. Detection, Characterization, and Defeat of NBC/M Facilities with	• Conducted integrated sensor, weapon, and targeting tool field tests for NBC/M and underground facility defeat and collateral effects mitigation as part of the Counterproliferation CP1 ACTD • Initiated the follow-on Counterproliferation Counterforce CP2 ACTD

Minimal Collateral Effects	• Agent defeat weapons system concepts collected from industry and DoD/DOE labs for evaluation
3. Detection, Characterization, and Defeat of Underground Facilities with Minimal Collateral Effects	• Technical evaluation of hard and deeply buried target defeat/neutralization concepts submitted by industry and the DoD/DOE labs • See ACE #2 entries above
4. Theater Ballistic Missile Active Defense	• Theater ballistic missile defense procurement transitioned to the Services; JTAMDO established • Successful flight tests for PATRIOT PAC-3/Guidance Enhanced Missile, Hawk, Navy Area Theater Ballistic Missile Defense, and the Israeli/BMDO Arrow programs • Completed 7 Theater High Altitude Area Defense system flight tests • Airborne Laser boost phase defense system entered Program Definition and Risk Reduction phase; contract issued to industry team to initiate system Dem/Val • Completed MoU with European partners for MEADS project definition and validation • National Missile Defense elevated to deployment readiness program, RFP for lead systems integrator released, and an Integrated Deployment Plan being drafted
5. Support for Special Operations Forces and Defense Against Paramilitary, Covert Delivery, and Terrorist NBC Threats	• Continued development of specialized technologies and equipment prototypes to assist SOF and Explosive Ordnance Disposal teams in countering CW/BW threats • Continued forward deployment of specialized equipment to enhance readiness sustainment • Enhanced coordination of Joint Service exercises and readiness sustainment activities • Formed organizational structure and initiated facility assessments to enhance U.S. force protection
6. Provide Consequence Management	• Established the Marine Corps Chemical Biological Incident Response Force • Initiated planning and development of the Consequence Management 911-BIO ACTD • Integrated consequence management training for state and local First Responders
7. Cruise Missile Defense	• Demonstration of Mountain Top surveillance radar technology and transfer to the Navy for further development; initiation of low cost cruise missile defense studies • Technology sharing and synergy with ballistic missile defense programs
8. Collection, Analysis, and Dissemination of Actionable Intelligence to Counter Proliferation	• See the Intelligence Annex to this report
9. Robust Passive Defense to Enable Sustained Operations on the NBC Battlefield	• Continued deployment of critical NBC detection and warning, individual and collective protection, and decontamination systems for use throughout the battlespace • Continuing advances in CW/BW medical defense RDT&E
10. BW Vaccine RDT&E and Production to Ensure Stockpile Availability	• Contract proposals for prime systems contractor being evaluated; award expected in FY 1997 • Continued production of anthrax vaccine to meet DoD stockpile needs in FY 1997; screened several BW vaccines for safety and efficacy; extensive vaccine RDT&E activities under way
11. Target Planning for NBC/M Targets	• User acceptance of integrated target planning and weaponeering tools by CINC USEUCOM for use in Bosnia as part of Operation Joint Endeavor
12. Prompt Mobile Target Detection and Defeat	• Development of a foliage penetrating radar and other sensors to defeat camouflage, concealment and deception; new capabilities for near real-time exploitation of wide area imagery • Target recognition algorithm demonstration as part of DARPA's Semi-Automated Imagery Processing ACTD • Demonstrated operational utility of C4I systems for rapid dissemination of intelligence to users
13. Detection, Tracking, and Protection of NBC/M and NBC/M-Related Materials and Components	• Deployment of prototype Specific Emitter Identification System for identifying ships at sea suspected of transporting NBC/M or related materials; fleet integration under way
14. Support Export Control Activities of the U.S. Government	• Reviewed over 18,000 export license application for military and dual-use technologies • Enhanced the "Wassenaar Arrangement", a new multinational export control framework
15. Support Inspection and Monitoring Activities of Arms Control Agreements and Regimes	• Continued inspection, monitoring, and escort support for nuclear weapons arms control treaties • Helping Ukraine, Belarus, and Kazakstan to become non-nuclear weapons states • Eliminated 64 SLBM launchers, dismantled 81 ICBMs, dismantled 20 heavy bombers, and sealed 59 nuclear weapons test tunnels and bore holes in FSU states • Transitioned over 15,000 FSU scientists and engineers formerly employed in NBC weapon production to more peaceful civilian employment • Streamlined management of R&D programs under DSWA to improve CTBT implementation • Continued development of a global continuous threshold monitoring network and data fusion knowledge base for CTBT verification • Technology R&D for CW/BW arms control treaty implementation, monitoring, and verification

an automated radionuclide particulate detector, as well as a prototype automated xenon gas detector for commercialization and use by the International Monitoring System.

- ***Securing Nuclear Materials in Russia and States of the Former Soviet Union (FSU).*** Material protection, control, and accounting (MPC&A) cooperation is now underway at over 40 locations in Russia and seven other FSU states, providing improved security for tens of tons of weapons-useable nuclear materials. This represents more than 75% of the known locations

possessing such materials. Negotiations are currently under way (scheduled to be completed this year) to expand MPC&A cooperation to include all weapons-useable nuclear material at all known facilities in the FSU. However, full implementation of MPC&A upgrades will take several years to complete.

- ***Initiative for Proliferation Prevention with Russia and FSU States.*** Under this program, cooperative projects between a coalition of 75 U.S. laboratories, corporations and universities, and the nuclear inheritor states of the FSU have engaged more than 2,700 former weapons personnel in the FSU in projects ranging from MPC&A and nuclear safety to materials science, biotechnology, and instrumentation – avoiding potential "brain drain" to proliferants and providing long term employment in non-weapons work.

- ***Strengthening the Nuclear Nonproliferation Regime.*** DOE's efforts have helped to promote adherence to the Nuclear Non-Proliferation Treaty and increase the effectiveness and efficiency of the International Atomic Energy Agency (IAEA). Successes, in part due to work associated with this program, included the negotiation and signing of the CTBT, the facilitation of IAEA inspections of excess fissile materials, and the canning of over 50 percent of the spent fuel cannisters at the North Korean nuclear reactor. Canning of the remaining spent fuel canisters is expected to be completed during the summer of 1997. Support for IAEA inspections of spent fuel stored in North Korea will continue.

Summary of Key U.S. Intelligence Activities

Many of U.S. Intelligence's activities cannot be described in this unclassified setting. The classified Intelligence Annex to this report contains a more thorough discussion of the activities and successes of U.S. Intelligence.

- ***Intelligence Community Support for Counterproliferation.*** In response to the CJCS's *Missions and Functions Study* and the *Counterproliferation 0400 CONPLAN*, U.S. Intelligence continues to work closely with the Joint Staff in support of the CINCs. The Defense Intelligence Agency's (DIA) Office of Counterproliferation, Nuclear, Biological, and Chemical Assessments, the Joint Staff's (J-2, Intelligence) Executive Agent for counterproliferation issues, continues to implement its CJCS-approved *Military Intelligence Action Plan*.

- ***Strategic Planning Process.*** U.S. Intelligence, through its corporate strategic and evaluation planning process, continues to support efforts to counter proliferation. This ongoing process contributes to the National Needs Process and the National Foreign Intelligence Program, the Joint Military Intelligence Program, and the Tactical Intelligence and Related Activities Program and Planning Guidance. A major benefit of this effort has been the placement of a significant number of DoD personnel within the DCI's Nonproliferation Center. This has helped integrate intelligence support into DoD counterproliferation needs and actions. U.S. Intelligence also has expanded its relations with law enforcement officials. The FBI and U.S. Customs Service, for example, have assigned senior agents to the Nonproliferation Center to assist in developing initiatives to counter proliferation.

- ***Operational Planning Process.*** DIA is linking counterproliferation intelligence production more directly to the CINCs' deliberate planning process. DIA is taking guidance from the Joint Strategic Capabilities Plan and direction from the CINCs' J-2s, J-3s (Operations), and J-5s which are enabling U.S. Intelligence to more clearly define and satisfy the intelligence requirements necessary to support CINC counterproliferation contingency planning and operations.

- ***Intelligence Successes.*** Some intelligence successes that can be described in this setting include:
    - Support to State Department efforts providing actionable intelligence to the United Nations Special Commission's inspection and monitoring activities in Iraq;
    - Development of a list of indicators to alert collectors and analysts that CW and BW are about to be used; similar initiatives are also under way to provide early warning alerts for the possible diversion of nuclear materials;
    - Support to congressional committees, including a report that reviewed and evaluated nonproliferation programs in the National Foreign Intelligence Program FY 1998 budget submission; and
    - Development of a detailed set of information needs to guide intelligence collection and analysis, known as *Nonproliferation: Compendium of Country-Specific Priority Intelligence Needs and Actions*.

CPRC Findings and Recommendations

The CPRC finds, as evidenced by the numerous program and activity accomplishments cited above and in the main body of the report, that the seriousness of NBC/M proliferation and NBC terrorist threats, and the need to enhance capabilities to counter them, are recognized throughout DoD (including OSD, the Joint Staff, Services, and CINCs), DOE, and U.S. Intelligence. Indeed, "countering proliferation" is an established and institutionalized priority within each of the CPRC-represented organizations. These efforts reflect the President's firm commitment to stem NBC/M proliferation and counter NBC terrorism. Much has been done, but much remains to do. Moreover, as decision makers, policy makers, and warfighters continue to reprioritize their nonproliferation, counterproliferation, and counterterrorism policy and strategy objectives, the CPRC will continue to review related DoD, DOE, and U.S. Intelligence activities and programs to ensure that they continue to meet evolving needs. The CPRC's recommendations for 1997 are summarized in Figure 1 and discussed below.

The FY 1998 President's budget addresses priority programs for countering NBC/M proliferation and NBC terrorism. *Therefore, the CPRC recommends that the FY 1998 President's budget for each of the CPRC-represented organizations be authorized and appropriated by the Congress.*

Although the activities and programs proposed in the FY 1998 President's budget will continue to produce substantial progress in national capabilities to counter NBC/M proliferation and NBC terrorism, areas of capability shortfall will remain. *Therefore, the CPRC directs each*

represented organization to continue to address the needs and requirements for countering proliferation and NBC terrorism as high priority items in their FY 1999 and out-year budgets. In light of the CPRC's finding that the need to enhance U.S. national capabilities to counter proliferation has become established and institutionalized within the DoD, DOE, and U.S. Intelligence, the CPRC has not identified specific programmatic options for FY 1999. The CPRC expects the normal budget development processes of each CPRC-represented organization to be adequate to ensure a robust, integrated program for countering proliferation. However, key areas for progress addressing certain specific aspects of the ACE priorities have been identified for special consideration during budget development activities.

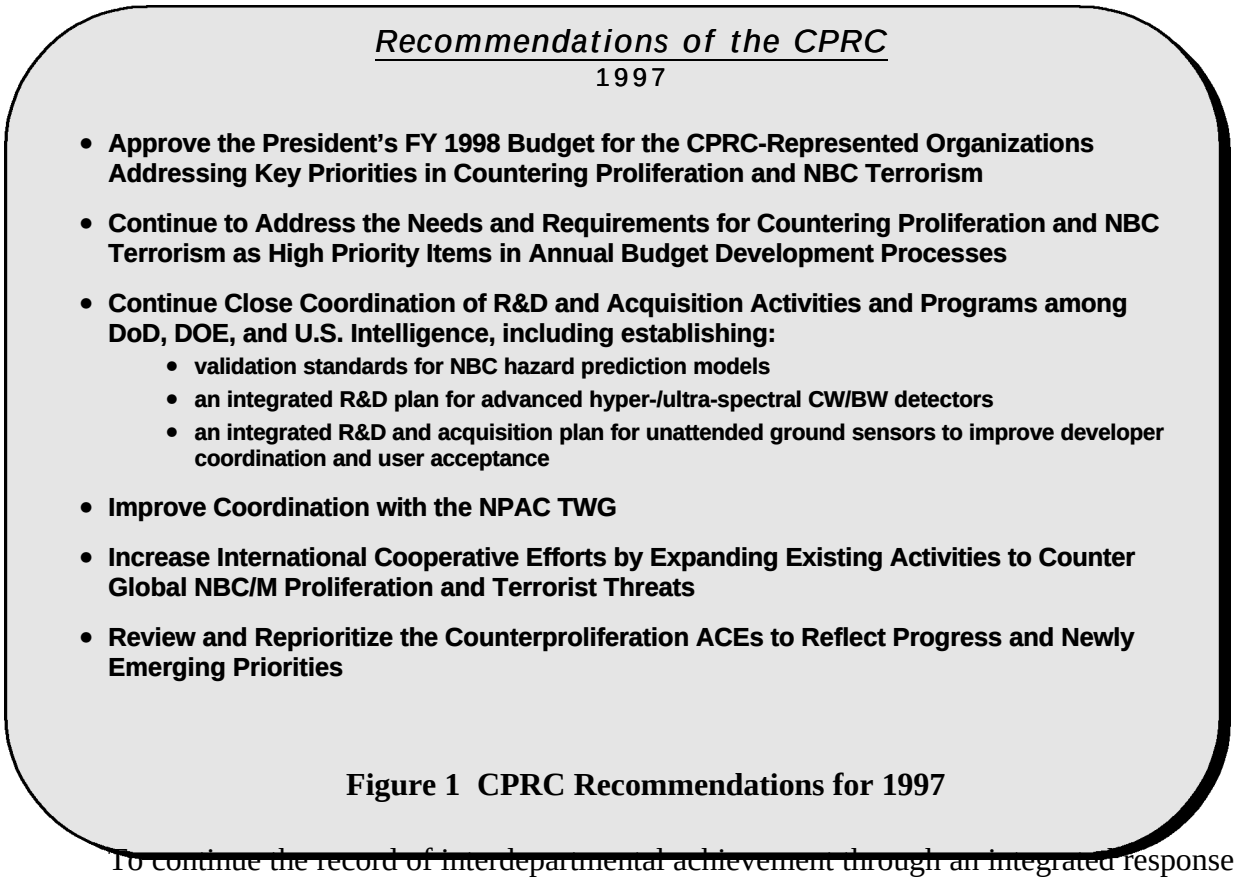

Figure 1 CPRC Recommendations for 1997

To continue the record of interdepartmental achievement through an integrated response to meeting the counterproliferation ACE priorities, *the CPRC recommends a continuation of the close coordination of counterproliferation-related R&D and acquisition activities and programs among DoD, DOE, and U.S. Intelligence.* To this end, the CPRC has identified three specific areas where improved interorganizational coordination can improve the efficiency, cost-effectiveness, and responsiveness of R&D and acquisition activities:

- *Establish "validation standards" for nuclear, biological, and chemical dispersion and hazard prediction models and designate a lead agency for implementation;*
- *Establish an integrated cooperative R&D plan for advanced state-of-the-art hyper-/ ultra-spectral sensors for chemical and biological detection* to improve coordination and synergize the efforts of various ongoing R&D activities; and

- *Establish an integrated R&D and acquisition plan for unattended ground sensors to improve cooperation within the developer community and enhance prospects for user acceptance* and "buy-in" of this maturing technology.

Because the Nonproliferation and Arms Control Technology Working Group (NPAC TWG) and the CPRC share similar goals and objectives for reducing the threat of NBC/M proliferation and terrorism, *the CPRC directs the CPRC Standing Committee to improve coordination and information sharing between its activities and those of the NPAC TWG and explore the possibility of joint cooperative efforts.*

Recognizing the global nature of NBC/M proliferation and NBC terrorist threats, *the CPRC recommends increasing international cooperative efforts to counter these threats by expanding existing cooperative activities in R&D, proliferation prevention, and counterterrorism being conducted by DoD, DOE, and U.S. Intelligence.* To expedite and more efficiently and effectively meet the challenges posed by these global problems, the CPRC continues to encourage and endorse cooperation with our international partners through joint activities, programs, and conferences.

The CPRC, through its Standing Committee, will continue to review and update the counterproliferation ACEs, reprioritizing them as required. This process is central to ensure that the ACEs continue to reflect the integration of CINC warfighting priorities and the overarching national security policy and strategy objectives they support. Updated and relevant ACEs assist the CPRC in meeting its program review responsibilities, while improving the focus of future programmatic and managerial efforts among the CPRC-represented organizations to counter NBC/M proliferation and NBC terrorist threats.